25X1

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

TOP SECRET

25X1C

25X1

Basic Imagery Interpretation Report

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER

25X1

KAPUSTIN YAR/VLADIMIROVKA MISSILE TEST CENTER

25X1A

MISSILE RANGES--STRATEGIC SSM & SPACE FACILITIES

USSR

FEBRUARY 1969

DECLASS REVIEW by NIMA/DOD

COPY NO. 106

12 PAGES

GROUP 1 EXCLUDED FROM AUTOMATIC DOWNGRADING AND DECLASSIFICATION

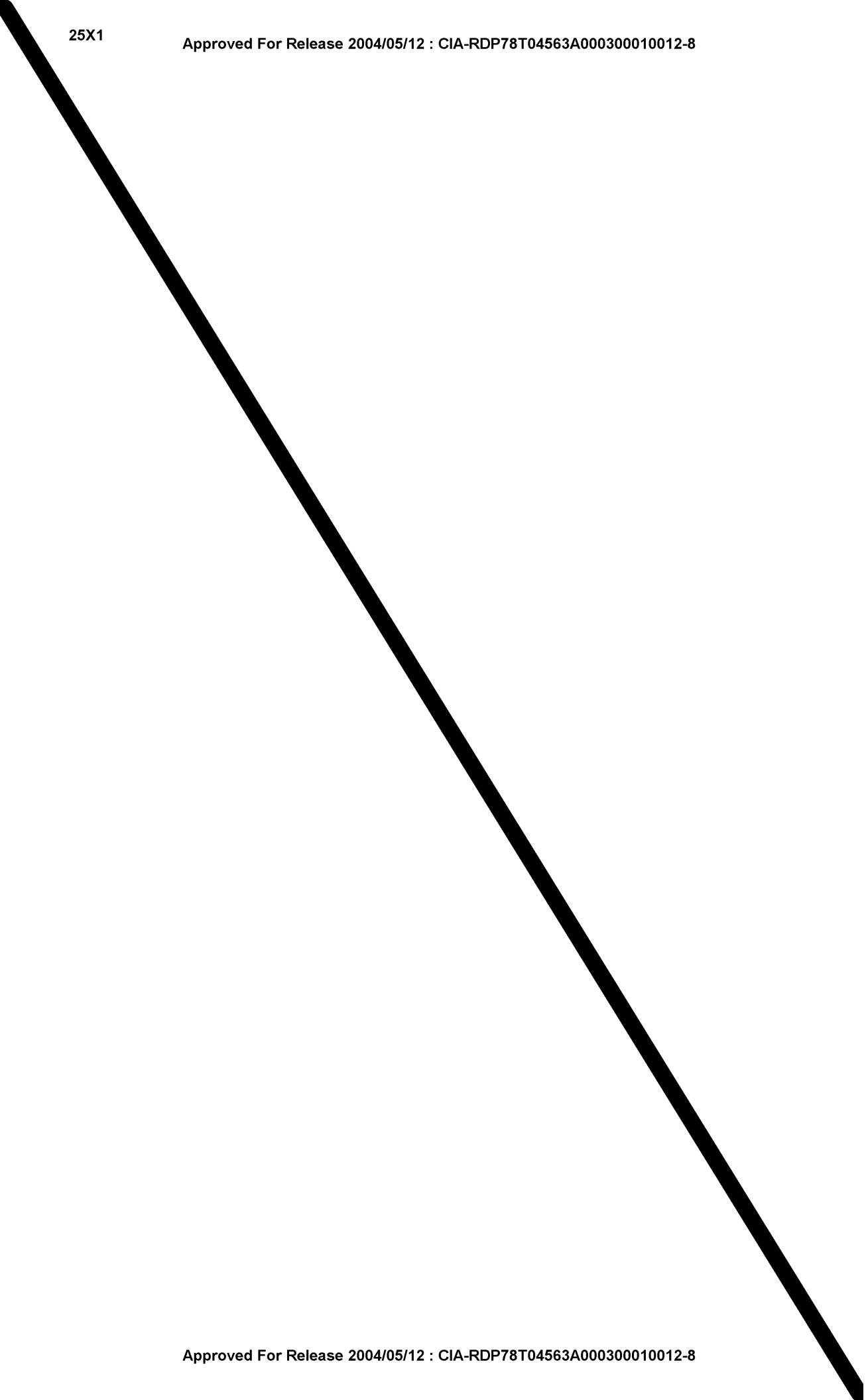
Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

TOP SECRET

25X1C

25X1

25X1
Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8



Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

RECORD COPY	COPY NO.	PUB. DATE	LOCATION	MASTER	DATE RECEIVED	LOCATION
				STOCK LEVEL	MINIMUM 1	MAXIMUM 13

DISPOSITION DATE(S)

CUT TO COPIES	DATE	CUT TO COPIES	DATE	COPIES DESTROYED
0	7-75			
CUT TO COPIES	DATE	CUT TO COPIES	DATE	
CUT TO COPIES	DATE	MASTER	DATE	

DATE MO.	DAY	YR.	RECEIVED OR ISSUED	NUMBER OF COPIES REC'D	ISS'D	BAL
3	19	69	Dist. Unit#113-125	13		13
3	19	69	Ret'd 13 113-125.		13	0

DATE MO.	DAY	YR.	RECEIVED OR ISSUED	NUMBER OF COPIES REC'D	ISS'D	BA

25X1

TITLE NPIC

Feb. 1969 SEC. CLASS. TS/ LOCATION 110344

25X1

25X1C

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

DATE			RECEIVED OR ISSUED	NUMBER OF COPIES			DATE			RECEIVED OR ISSUED	NUMBER OF COPIES		
MO.	DAY	YR.		REC'D	ISS'D	BAL	MO.	DAY	YR.		REC'D	ISS'D	BAL

25X1

TITLE NPIC

Feb. 1969 TS

SEC. CLASS. LOCATION

25X1

25X1C

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

25X1 25X1
25X1 Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8 25X1
25X1 25X1C

INSTALLATION OR ACTIVITY NAME	COUNTRY
Kapustin Yar/Vladimirovka Missile Test Center	UR

25X1A

UTM COORDINATES	GEOGRAPHIC COORDINATES
NA	48-35N 045-45E

MAP REFERENCE

SAC. USATC, Series 200, Sheets M0235-17HL, 4th ed, Nov 67; M0235-18HL, 3d ed, Aug 66; M0235-22HL, 5th ed, Jun 66; M0235-23HL, 4th ed, Mar 68, scale 1:200,000 (SECRET/ 25X1

25X1 25X1C

LATEST IMAGERY USED	NEGATION DATE (If required)
25X1D	NA

ABSTRACT

This report gives a brief description of the offensive and defensive missile launch facilities and associated areas at the Kapustin Yar/Vladimirovka Missile Test Center. It contains a location map and two tables providing data on the major facilities at the test center. The information in the report is current as of 25X1D

The offensive missile launch facilities at the test center are devoted to research and development and troop training associated with SRBM, MRBM, and IRBM systems. There are also facilities for aerodynamic missile testing and space launch activities.

The defensive missile launch facilities at the test center are devoted to research and development and troop training associated with the SA-1, SA-2, and SA-3 SAM systems and with the radar systems used in connection with the SA-1, SA-2, SA-3, and SA-5 SAM systems.

INTRODUCTION

The Kapustin Yar/Vladimirovka Missile Test Center (KY/Vlad MTC) was established shortly after World War II and was the first Soviet missile test center. It is situated on the north bank of the Volga River, in the southwestern USSR, approximately 60 nautical miles (nm) east-southeast of the city of Volgograd and 330 nm northwest of the Caspian Sea. The surrounding terrain is a treeless semidesert with elevations ranging from a few feet below sea level to approximately 500 feet above sea level at a point near Lake Baskunchak. Most of the facilities at the test center are between 50 and 75 feet above sea level. The climate in the area is characterized by hot, dry summers and cold, dry winters.

The test center is served by road, rail, air, and possibly water transportation networks. It is on the primary road between Volgograd and Astrakhan, and it is connected to Volgograd, Astrakhan, and Saratov by single-track rail line. It is served by the Kapustin Yar and the Akhtubinsk/Vladimirovka airfields and there are port facilities on the Volga River at Akhtubinsk.

The test center is divided geographically into two main parts: a defensive missile rangehead in the west and an offensive missile rangehead in the east (Figure 1).

BASIC DESCRIPTION

Offensive Missile Facilities

The surface-to-surface missile launch facilities in the eastern half of the Kapustin Yar/Vladimirovka Missile Test Center consist of eight launch complexes designated A through H with 38 launch positions, including 28 launch pads and 10 silos. There are also facilities for aerodynamic missile testing and space launch activities (Table 1).

Launch Complex A

Launch Complex A 1/ may have been the original ballistic missile launch complex at Kapustin Yar. It consists of two launch pads, two abandoned ramp structures, and a support area which contains a missile assembly and checkout building. On recent coverage new construction has been observed underway in the launch pad area. Launch Complex A has been used for SS-4 MRBM troop training, 2/ but recently it has been utilized for SRBM troop training.

25X1 25X1
Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8 25X1
25X1 25X1C

An SRBM troop training area, approximately 1 nm north of Launch Complex A, was first observed in [redacted] It is associated with Launch Complex A and it consists of a support area with barracks and motor pool facilities, field training positions, and bivouac areas. 25X1D

Launch Complex B

Launch Complex B, 3/ approximately 1 nm south of Launch Complex A, was first observed in [redacted] The complex consists of three adjoining launch areas and a relatively small support area. It was used for naval cruise missile research, development, and troop training up to [redacted] when the complex appeared to become inactive. In late [redacted] evidence of a probable reactivation of the complex was noted when new construction was observed in the support area. 25X1D 25X1D 25X1D

Launch Complex C

Launch Complex C is the Soviet Rocket Forces (SRF) facility used for MRBM and IRBM research, development, and troop training and is the complex from which the KY/Vlad MTC space launches originate. It is south of Launch Complex B, in the middle of the north-south line of SSM launch complexes. It consists of six separate launch areas, designated 1C through 6C, and extensive support facilities, including missile and warhead storage and handling facilities, electronics and communications facilities, and administration and housing facilities. 4-10/

Launch Area 1C, 11/ present in [redacted] with a single launch pad, has been modified extensively and now consists of three rail-served launch pads. The function of the two newer launch pads is undetermined. The original launch pad has recently been utilized for SS-4 missile exercises. 25X1D

Launch Area 2C 12/ was first seen in [redacted] It has two launch pads and probably was a prototype launch area for SS-3 deployment in the Soviet Union. The role of the northern launch pad, on which a service tower was constructed in [redacted] is unknown. SS-4 missile exercises have been observed on the southern launch pad. 25X1D 25X1D

Launch Area 3C, 13/ also present in [redacted] consists of one launch pad and two connecting hardstands. It is used for troop training and crew firing of the SS-4 MRBM. 25X1D

Launch Area 4C, 14/ first observed under construction in [redacted] has two launch sites, 4C-1 and 4C-2. Launch Site 4C-1 has four silos and was the prototype SS-4 MRBM hard site. Modification of the silos was started in [redacted] and the fourth silo is currently being modified. The present role of the site is unknown. Launch Site 4C-2, with three launch silos, was the prototype for the SS-5 IRBM hard site and is still utilized for SS-5 training exercises at the present time. 25X1D 25X1D

Launch Area 5C, 15/ first observed under construction in [redacted] consists of two launch sites, 5C-1 and 5C-2. The two launch pads of Launch Site 5C-1 were prototype launch pads for the SS-5 missile system and still serve as training pads for this missile system. Site 5C-2 apparently was intended as a training site for the SS-4 missile system but was never completed. A probable launch control facility is now under construction at Site 5C-2. 25X1D

The southernmost launch area of Launch Complex C is Launch Area 6C, 16, 17/ where three launch silos are under construction. It probably represents a prototype and/or training facility for a small, solid-propellant ballistic missile.

Launch Complex D

Launch Complex D, south of Launch Complex C, is an aerodynamic missile facility. It was present in [redacted] and consists of four launch sites, of which only two, Launch Sites 1D and 3D, are considered active at present. Straight-wing drones have recently been observed at Site 1D, and a large high-performance aerodynamic vehicle has been seen at Site 3D. The Final Assembly and Checkout Area and the Missile Handling and Storage Area for Launch Complex D, approximately 8 nm south of the complex, was present [redacted] 25X1D 25X1D

Launch Complex E

Launch Complex E, 18/ approximately 4 nm north of Launch Complex A, was under construction in [redacted] and it appeared that two launch pads were to be constructed. How- 25X1D

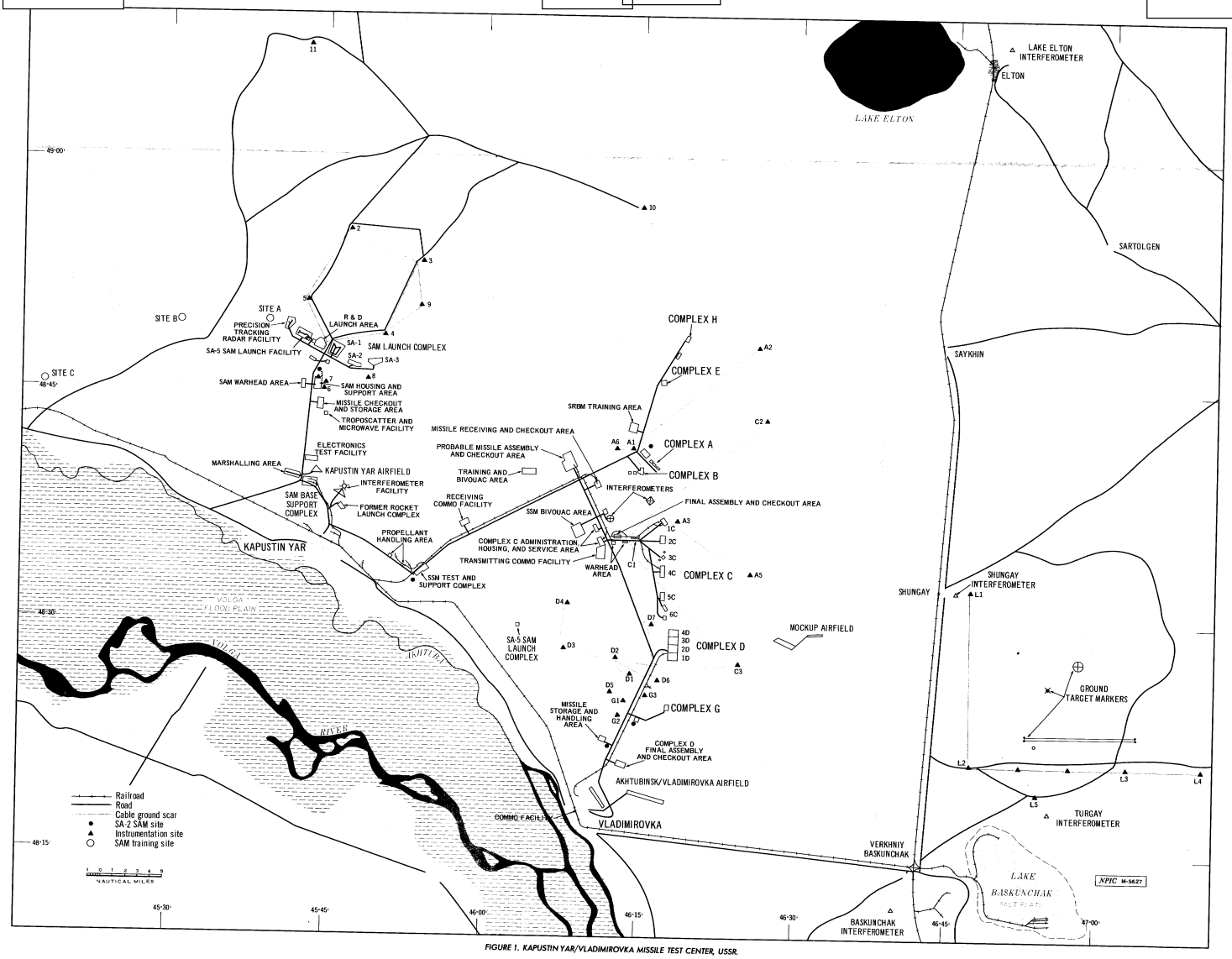


FIGURE 1. KAPUSTIN YAR/VLADIMIROVKA MISSILE TEST CENTER, USSR.

ever, only one launch pad was completed. The missile system associated with the completed pad has not been determined.

Launch Complex F

Launch Complex F is located at approximately 48-37N 044-56E, about 2 nm north of the Receiving Communications Facility. It formerly served as a field training area and consisted of numerous field positions and revetments. No activity or exercises have been observed at this complex since and the area is considered abandoned.

Launch Complex G

Launch Complex G, 19/ approximately 4 nm south of Launch Complex D, was first observed in It consists of an abandoned launch area and a housing and support area. An aerodynamic missile or target drone was observed near the housing and support area in The two former launch pads are now being used as ground targets. 20/

Launch Complex H

Launch Complex H, 21/ approximately 3 nm north of Launch Complex E, has two launch pads and a small associated missile support area. It was first seen under construction in The function of the complex and the missile system associated with it have not been established.

Akhtubinsk/Vladimirovka Airfield

The Akhtubinsk/Vladimirovka Airfield is approximately 8 nm south of Launch Complex G, at the southern end of the SSM rangehead. It has undergone steady expansion since it was first observed in It is considered to be the airborne weapons research and development center for the USSR. The airfield has the necessary support facilities for airborne weapons research and crew training.

Defensive Missile Facilities

The defensive, or surface-to-air missile (SAM), facilities are located in the western half of the test center and consist of the following major components: precision tracking radar facility, SA-5 launch facility, the SA-1 and SA-2 research and development launch area, SA-1 (herringbone) launch site, SA-2 launch area, SA-3 launch area, SAM training sites A, B, and C, and several ancillary support installations.

Precision Tracking Radar Facility

The precision tracking radar facility is at the western terminus of the SAM launch complex main service road. It consists of a large drive-through building with a 40-foot-diameter dish on top, a transformer yard, two parking aprons, and several small buildings and structures. The facility was first observed under construction in and was initially identified as a probable SAM launch area. Construction continued, and the observation of the dish in led to identification of the site as a precision tracking radar facility. In a 95-foot-diameter environmental dome was placed over the dish. 22/

SA-5 Launch Facility

The SA-5 launch facility is in the SAM launch complex, between the precision tracking radar facility and the R & D launch area. It consists of two launch positions, two engagement radar positions, and three buildings. Construction was first observed in and the facility was completed and occupied by 22/

R & D Launch Area

The R & D launch area, which was first observed on photography in was probably used in developing the SA-1 and SA-2 SAM systems. It is situated between the SA-5 launch complex and the SA-1 launch site and consists of five launch sites (designated A, C, D, E, and F), an electronic facility, and a Yo Yo guidance site. 22/

Launch Site A. Launch Site A is the original prototype SA-1 site from which the herringbone launch sites were later developed. The site consists of six launch positions and a square hardstand, probably used as a control center. Each launch position has a

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

25X1D

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

permanently emplaced SA-1 erector and launcher.

Launch Site C. Launch Site C, which is similar to Launch Site A, has six SA-1 launch positions and a probable control center. Each launch position is occupied by a permanently emplaced erector and launcher.

Launch Site D. This site does not appear to be designed for testing any known missile system. When the site was first observed in [redacted] it consisted of three circular aprons, a bunker, and two small sheds. Radar equipment was observed in open storage here as early as [redacted] but no significant activity was observed until [redacted] when ground scarring was observed preliminary to the construction of two 55-foot-diameter troposcatter antennas.

Launch Site E. Launch Site E, which was first observed in [redacted] consists of two excavated emplacements which resemble SA-2 launch positions and a revetted guidance area. No construction has taken place since the site was first observed.

Launch Site F. This is a slightly modified Type B-configuration SA-3 SAM site. It was first observed under construction in [redacted] and it appeared to be complete in [redacted] It consists of four unrevetted launch positions, a revetted guidance area, and a probable control building.

Electronic Facility. This facility was formerly an SA-2 SAM site and was designated Launch Site B. By [redacted] the SA-2 launch positions had completely deteriorated and three radar mounds had been constructed. In [redacted] a Bar Lock radar and a Stone Cake radar were present on two of the radar mounds and a new type of height finder radar was present in the guidance area. No changes in the site were noted until [redacted] when it was observed that the Bar Lock and Stone Cake radars had been removed.

R & D Yo Yo Guidance Site. The R & D Yo Yo radar guidance site is approximately 8,600 feet south-southwest of the R & D SA-1 launch sites. The Yo Yo guidance site consists of a large dumbbell-shaped control building with a large paved apron, approximately 15 other buildings and structures, and a power substation. The research and development work on the Yo Yo radar and the SA-1 system was nearing completion by the time the KY/Vlad MTC SAM Test Range was first observed on [redacted] photography in [redacted] The only activity observed at this site has been the presence of two Yo Yo radar units in varying degrees of assembly or disassembly on the paved apron in front of the control building. 22/

SA-1 (Herringbone) Launch Site

The SA-1 (herringbone) launch site, which was the prototype of the Moscow SA-1 system, is located between the R & D launch area and the SA-2 launch area. Research and development work on the SA-1 system was completed prior to [redacted] and since that time this site has functioned as a training site. No significant changes in facilities or new construction have been observed since the site was first seen in [redacted]

The Yo Yo guidance site consists of a rectangular control building, an adjacent apron which supports a Yo Yo radar, and nine other buildings and structures. This site is similar to the Yo Yo guidance sites around Moscow, except that the control building at this site is not earth covered. 22/

SA-2 Launch Area

The SA-2 launch area is located between the SA-1 site and the SA-3 launch area. It was first observed under construction in [redacted] but it was not clearly defined as an SA-2 launch area until [redacted] By the latter date the area included two completed launch sites, A and B, with ancillary sites AA and BB and Launch Site E under construction. Construction of Launch Site D was first observed in [redacted] and of Launch Site C in [redacted] Site D, which appeared similar to Site C, was abandoned soon after initial construction was observed.

A rectangular road with three paved hardstands was constructed on the south side of the service road by [redacted]. No equipment has been observed on the hardstands and the function of this area remains undetermined.

Six temporary training sites, three on each side of the foregoing SA-2 sites, were present and active until [redacted] When the permanent SA-2 SAM sites became operational, activity at the temporary sites diminished and by early 1963 the temporary sites had disappeared.

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

25X1D

Table 2. Data on Major Defensive Facilities at KY/Vlad MTC

25X1A

Launch Site & Group	Negation	First Seen	Geographic Coordinates Lat	Long	Elev (ft)
Precision Tracking Radar Facility			48-49-25N	045-42-50E	50
SA-5 Launch Facility			45-48-55N	045-43-50E	50
R&D Launch Area			48-48-30N	045-44-10E	50
SA-1 Launch Site			48-47-40N	045-45-25E	50
SA-2 Launch Area			48-46-45N	045-47-00E	50
SA-3 Launch Area			48-46-50N	045-44-00E	50
SAM Training Site A			48-49-45N	045-38-30E	50
SAM Training Site B			48-49-20N	045-29-55E	50
SAM Training Site C			48-45-20N	045-16-25E	50
SAM Housing & Support Area			48-46-15N	045-43-50E	50
SAM Warhead Area			48-44-55N	045-42-50E	50
SAM Checkout & Storage Area			48-44-30N	045-44-00E	50
Kapustin Yar Airfield			48-40-30N	045-43-40E	50
SAM Marshalling Area			48-39-35N	045-41-55E	50
SAM Base Support Complex			48-39-10N	045-43-20E	50
Electronic Test Facility			48-41-00N	045-43-15E	50
Troposcatter & Microwave Communications Facility			48-43-55N	045-44-20E	50
SAM Site B30-2			48-46-30N	045-43-50E	50
Instrumentation Site 1 & Range Control			48-46-25N	045-43-50E	50
Instrumentation Site 2			48-56-30N	045-46-40E	50
Instrumentation Site 3			48-53-00N	045-57-30E	50
Instrumentation Site 4			48-49-40N	045-52-00E	50
Instrumentation Site 5			48-51-10N	045-42-55E	50
Instrumentation Site 6			48-45-45N	045-43-55E	50
Instrumentation Site 7			48-46-20N	045-43-55E	50
Instrumentation Site 8			48-46-15N	045-48-50E	50
Instrumentation Site 9			48-49-55N	045-57-55E	50
Instrumentation Site 10			48-57-48N	046-15-40E	50
Instrumentation Site 11			49-08-06N	045-42-05E	50

25X1
25X1
TOP SECRET
- 7 -
5X1C
25X1

25X1
25X1
TOP SECRET
25X1
25X1C
25X1

Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8

Launch Site A. Launch Site A is a fan-shaped SA-2 SAM site presently consisting of four revetted and two unrevetted launch positions, a revetted guidance area, and six buildings and structures. Ancillary launch site AA consists of two unrevetted launch positions, an unrevetted guidance area, and four buildings and structures on a loop road extending from Launch Site A. Both Launch Site A and its ancillary site have been used for troop training exercises since their completion.

Launch Site B. This is a fan-shaped SA-2 SAM site consisting of three revetted and three unrevetted launch positions, an unrevetted guidance area, and two buildings. The site appeared to be complete in [redacted] when the area was first observed on photography 25X1D
of good interpretability. Ancillary launch site BB consists of two unrevetted launch positions, an unrevetted guidance area, and three buildings and structures on a loop road 25X1D
extending from Launch Site B. The ancillary site was observed under construction in [redacted] and was not completed until [redacted] Both Launch Site B and its ancil- 25X1D
lary site have been used for troop training exercises since their completion.

Launch Site C. Launch Site C consists of four unrevetted launch positions, an unrevetted guidance area, and five buildings and structures. The site was probably com- 25X1D
pleted in [redacted] Since then no structural changes have been observed and the site has been used for troop training exercises.

Launch Site D. This site was first observed under construction in [redacted] and it 25X1D
appeared to be similar to Launch Site C. Construction of the site was curtailed, however, and it was subsequently abandoned.

Launch Site E. This site consists of three unrevetted launch positions, an unrevetted 25X1D
guidance area, two buildings directly associated with Launch Site E, and another larger 25X1D
building which serves as a control building for the entire SA-2 launch area. Since [redacted] [redacted] when the site was probably completed, it has been used for troop training exercises.

SA-3 Launch Area

The SA-3 launch area is at the eastern terminus of the SAM launch complex main service road. The launch area was probably used in developing the SA-3 system. It consists of four launch sites (designated A through D) and an instrumentation and control site south of the launch area which appears to be cable connected to the launch area. Since the completion of the SA-3 development program the area has functioned as a troop training facility. 22/

Launch Site A. Launch Site A is a Type D-configuration SA-3 SAM site consisting of four revetted launch positions and a revetted guidance area. It was first observed under 25X1D
construction in [redacted] No major changes in facilities have been observed since 25X1D
it was completed in [redacted]

Launch Site B. This is a Type B-configuration SA-3 SAM site consisting of one revetted 25X1D
and three unrevetted launch positions, a revetted guidance area with a tower approximately 85 feet high, and three buildings and structures. When the site was first observed in [redacted] it appeared to be basically complete and operational.

Launch Site C. Launch Site C is a modified Type B-configuration SA-3 SAM site consisting of four unrevetted launch positions, a revetted guidance area, and four buildings and structures. It was first observed under construction in [redacted] 25X1D

Launch Site D. This site is a Type A-configuration SA-3 SAM site consisting of four launch positions, two hold positions, and a guidance area, all unrevetted. An incongruity has been noted at this site: it has an SA-3 configuration with the launch positions designed for the offloading of the SA-3 missile; however, the only radar observed in the guidance area has been a Fan Song radar, which is associated with the SA-2 system. Wheel align- 25X1D
ment chocks for the SA-3 transporter are observed at the launch positions, but no launchers or missiles have been observed in the launch positions.

25X1D In [redacted] a [redacted] nvironmental dome was first observed in front of the launch positions. The function of this dome is undetermined.

SAM Training Sites A, B, and C

SAM Training Site A is 16 nm north-northwest of Kapustin Yar and is served only by unimproved roads and trails. The site was laid out as an A-configuration SA-3 SAM site. No launchers or missiles have been observed at the site, however, and the launch positions are now overgrown by vegetation. A Low Blow radar was observed in the guidance area

25X1D up to [redacted] when it was replaced by a Fan Song radar. This site and SAM Training Sites B and C appear to be similar to Launch Site D in the SA-3 launch area. 25X1D

25X1D SAM Training Site B is 17.5 nm northwest of Kapustin Yar and is similar in appearance to SAM Training Site A. The only large-scale photographic coverage of this site in [redacted] revealed a Fan Song radar in the guidance area. The former launch positions of the site are overgrown by vegetation.

SAM Training Site C is 21.5 nm west-northwest of Kapustin Yar and is similar, possibly identical, to SAM Training Sites A and B. Few details of this site are known because it has been covered only by KH-4 photography. 22/

SAM Housing and Support Area

The entrance to the SAM housing and support area is 1.9 nm south of the SAM launch complex, on the eastern side of the SAM test range main service road. The area is fenced in two separate sections, A and B.

Section A, the larger of the two sections, covers approximately 127 acres. Within this section are 18 multistory barracks-type buildings and seven single-story buildings. The section also contains two motor pools with three maintenance buildings, a heating complex, and numerous support structures.

Section B, immediately south of Section A, covers an irregularly shaped area of approximately 16 acres. It contains five storage-type buildings and a possible administration building. The section probably functions as a storage area. 23/

SAM Warhead Area

The SAM warhead area is on the west side of the SAM test range main service road, directly west of the SAM housing and support area. It contains four buildings, three U-shaped revetments, and several parking areas. The precise function of this area is undetermined, but it is probably used for warhead assembly and possibly for assembly of entire missiles. 23/

SAM Checkout and Storage Area

The SAM checkout and storage area is on the east side of the SAM test range main service road, 2.2 nm south of the SAM housing and support area. It consists of two large drive-through buildings on a circular road pattern, 11 revetted storage buildings, three unrevetted buildings, a revetted spherical tank, and four open storage revetments. 23/

Kapustin Yar Airfield

The Kapustin Yar Airfield is just north of the SAM base support complex. The airfield has an east-west concrete runway 3,950 by [redacted] It also has two serviceable sod runways, one approximately 3,155 feet long and oriented northeast-southwest and the other approximately 3,600 feet long and oriented southeast-northwest. The airfield support area consists of a motor pool, a probable heatplant, several single-family-type dwelling units, a barracks, and several support buildings. 25X1D

SAM Marshalling Area

25X1D The SAM marshalling area is near the southern end of the SAM test range. When first observed in [redacted] the marshalling area consisted of six concrete aprons and a support area southeast of the fenced aprons. Three additional aprons were con-
25X1D structed by or during [redacted] The support area has also been expanded since it was initially observed and at present it consists of housing and administration buildings, a motor pool, a heatplant, and a messhall. A paved area first observed in [redacted] to the rear of Aprons 5 and 6 is probably involved in some phase of equipment checkout. 25X1D

The extensive SAM activity observed on the aprons is probably related to the receiving, checking, and issuing of SA-2 and SA-3 missile equipment to SAM units.

SAM Base Support Complex

The SAM base support complex is approximately 7.4 nm south of the SAM launch complex. It consists of a base support and housing area, a rail-to-road transfer point, and two storage areas.

Base Support and Housing Area. The base support and housing area, covering approximately 261 acres, contains 102 structures. It consists of a SAM support facility, a radar

site, a power substation, a heatplant, several motor pools, and storage and warehouse facilities.

Electronic Test Facility

The electronic test facility is on the east side of the SAM test range main service road, 1 nm north of the Kapustin Yar Airfield, and 5.5 nm south of the SAM launch complex. The facility contains five administration and control buildings, four radar mounds (two occupied by Back Net radars and two occupied by Bar Lock radars), four additional radar test areas, three hardstands, and 25 support buildings and structures.

A Shock Sing radar, similar to the one seen at the Gorkiy Research and Development Electronics Facility, is atop a building in the easternmost radar test area. This is the most recently constructed of the four test areas, with initial construction observed as late as [redacted] 25X1D

An elevated platform for a Beer Can radar is located immediately west of the Shock Sing radar. Construction was first observed in [redacted] 25X1D

A second elevated platform, which supports a [redacted] radome, is cable connected to the Beer Can radar and to a control building. Construction was first evident in [redacted] 25X1D 25X1D

Troposcatter and Microwave Communication Facility

This facility, first observed on photography of [redacted] is southeast of the SAM checkout and storage area. It consists mainly of mobile electronic vans and van trucks. An administration building is the only permanent fixture in the facility. At present one R-400 microwave communications antenna and four 10-meter-diameter field transportable troposcatter antennas are observed at the facility. 25X1D

SAM Site B30-2

SAM Site B30-2 is an operational fan-configuration SA-2 SAM site consisting of six launch positions, three hold positions, and a guidance area, all revetted. The site serves as a range defense and no R & D or training role is believed to be associated with it.

Range Control Facility and Instrumentation Sites

At the northern end of the SAM housing and support area is the range control facility. The facility consists of a large control building, six smaller buildings and structures, and several parking aprons. It is utilized as the control point for the instrumentation sites on the test range. The facility also functions as an instrumentation site, as evidenced by the optical data collection and beacon tracking radar systems observed there.

The 11 instrumentation sites at the SAM test range appear to be connected by buried cable to the range control facility. Sites 6 and 7 no longer appear to function actively as part of the range instrumentation pattern, but they appeared to be connected to the range control facility in [redacted] and they were probably active at that time. 25X1D

Instrumentation Sites 1, 2, 10, and 11 are occupied by Radar C's (Fire Wheel or Ship Wheel radars) which are used to track missiles fired from the SAM launch complex along their downrange flight. These radars, along with six Radar C's approximately 89 nm downrange at the Pallasovka Air Warning Radar Facility, form an elongated diamond pattern.

The range control facility and all of the active instrumentation sites, with the exception of Site 4 and possibly Site 8, have cylinder optical shelters. The range control facility and all of the instrumentation sites, with the exception of Sites 1, 10, and 11, probably have photographic tracking capability. R-400 microwave antennas are observed at Instrumentation Sites 3 and 10.

REFERENCES

25X1D

25X1 *Latest mission covering the missile test center.

MAPS OR CHARTS

25X1
SAC. US Air Target Chart, Series 200, Sheet M0235-17HL, 4th ed, Nov 67, scale 1:200,000 (SECRET/
25X1C
25X1
SAC. US Air Target Chart, Series 200, Sheet M0235-18HL, 3d ed, Aug 66, scale 1:200,000 (SECRET/
25X1C
25X1
SAC. US Air Target Chart, Series 200, Sheet M0235-22HL, 5th ed, Jun 66, scale 1:200,000 (SECRET/
25X1C
25X1
SAC. US Air Target Chart, Series 200, Sheet M0235-23HL, 4th ed, Mar 68, scale 1:200,000 (SECRET/
25X1C

DOCUMENTS

25X1
1. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Complex A, Jul 67
25X1
(TOP SECRET
25X1
2. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Troop Training Area; SSM Bivouac Area; Complex C Administration, Housing, Service Areas North and South, Apr 67 (TOP SECRET
25X1
25X1
3. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Complex B, Aug 67
25X1
(TOP SECRET
25X1
4. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Complex C Tracking Facility and Complex C Interferometer/Range Rate Facility, Jun 67 (TOP SECRET
25X1
25X1
5. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Final Assembly and Checkout Area, Launch Complex C, Mar 67 (TOP SECRET
25X1
25X1
6. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Warhead Handling and Check-out Areas East and West, Mar 67 (TOP SECRET
25X1
25X1
7. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Complex C Operations Area, Mar 67 (TOP SECRET
25X1
25X1
8. Comparison of Selected Support Facilities at Soviet Missile Test and Space Centers (PMSC, KY/Vlad MTC, and TTMTC), May 67 (TOP SECRET
25X1
25X1
9. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Rangehead Transmitting Communications Facility, Aug 67 (TOP SECRET
25X1
25X1
10. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Probable Missile Assembly and Checkout Area and Missile Receiving and Checkout Area, Apr 67 (TOP SECRET
25X1
25X1
11. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Area 1C, Mar 67
25X1
(TOP SECRET
25X1
12. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Area 2C, May 67
25X1
(TOP SECRET
25X1
13. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Area 3C, May 67
25X1
(TOP SECRET
25X1
14. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Area 4C, Mar 67
25X1
(TOP SECRET
25X1
15. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Area 5C, Mar 67
25X1
(TOP SECRET
25X1
16. Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Area 6C, Dec 67
25X1
(TOP SECRET

25X1

25X1

REFERENCES (Continued)

17. [redacted] Silos and Probable Launch Control Facility Construction, Launch Complex C, Kapustin Yar/Vladimirovka Missile Test Center, USSR, Sep 68 (TOP SECRET [redacted]

18. [redacted] Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Complex E, Jun 67 (TOP SECRET [redacted]

19. [redacted], Kapustin Yar/Vladimirovka Missile Test Center, USSR, Launch Complex G, Jul 67 (TOP SECRET [redacted]

20. [redacted] Ground Target Patterns, Vladimirovka Advanced Weapons and Research Center, KY/Vlad MTC, USSR, Oct 67 (TOP SECRET [redacted] -handle via [redacted]

21. [redacted], Launch Complex C, SSATC, Compared to Launch Complex H, KY/Vlad MTC, USSR, May 67 (TOP SECRET [redacted] -handle via [redacted]

22. [redacted] SAM Test Range, Kapustin Yar/Vladimirovka Missile Test Center, USSR, Part I, Sep 67 (TOP SECRET [redacted]

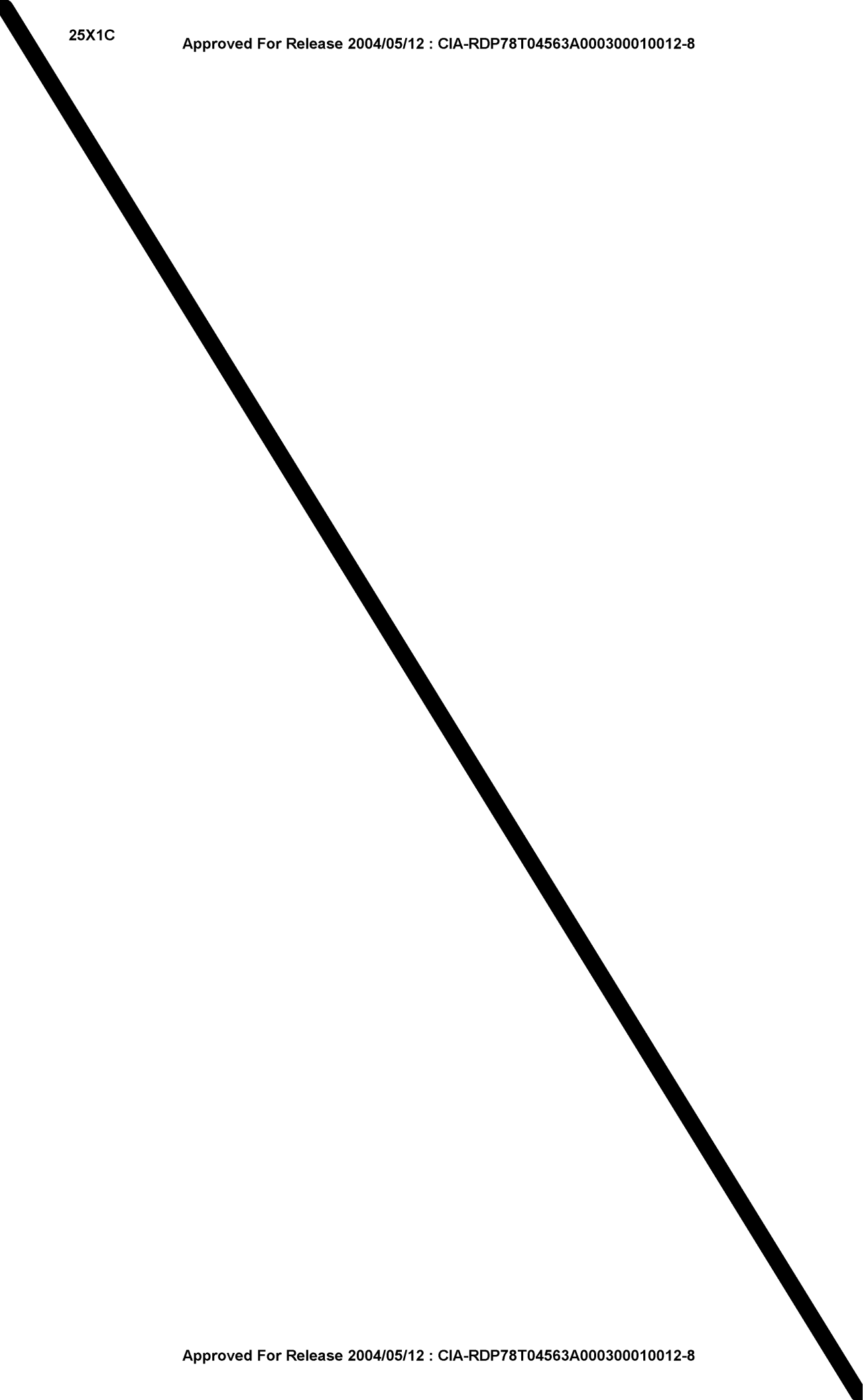
23. [redacted], SAM Test Range, Kapustin Yar/Vladimirovka Missile Test Center, USSR, Part II, (TOP SECRET [redacted]

REQUIREMENT

COMIREX BR-P/002-69

NPIC Project 210264

25X1C
Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8



Approved For Release 2004/05/12 : CIA-RDP78T04563A000300010012-8